DIRECT TESTIMONY OF

MARK C. FURTICK

ON BEHALF OF

DOMINION ENERGY SOUTH CAROLINA, INC.

DOCKET NO. 2020-2-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.

A. My name is Mark C. Furtick. My business address is 220 Operation Way, Cayce, South Carolina. I am the Manager of Renewable Energy Programs and Technical Services for Dominion Energy South Carolina, Inc. ("DESC" or the "Company").

Q. STATE BRIEFLY YOUR EDUCATION, BACKGROUND, AND EXPERIENCE.

A. I am a graduate of the University of South Carolina with a Bachelor of Science degree in Mechanical Engineering. I began my utility career in 1986 and have worked at various positions in Electric Operations and Operations Support Engineering at South Carolina Electric & Gas Company (now DESC). In 2015, I assumed my current role as Manager of Renewable Energy Programs and Technical Services.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to discuss the performance and costs associated with DESC's Distributed Energy Resources ("DER") programs during the review period of January 1, 2019, through December 31, 2019 ("Review Period"), provide the DER program cost projections for the forecast period January 1, 2020, through April 30, 2021 ("Forecast Period"), and update the Company's plans to invest in DER facilities pursuant to S.C. Code Ann. § 58-39-130(D).

Q. UNDER WHAT AUTHORITY DID THE COMPANY IMPLEMENT DER PROGRAMS?

A. In Docket No. 2015-54-E, the Company sought authorization of the Commission to participate in a DER program under the South Carolina Distributed Energy Resource Act ("Act 236"). In Order No. 2015-512, the Commission granted the Company's petition and concluded that DESC's proposed DER Programs, as modified by the Settlement Agreement entered into by the parties of record to that proceeding, were reasonable and prudent. In approving the Settlement Agreement, the Commission also determined that these programs would result in the development of approximately 42 megawatts ("MW") of renewable energy facilities sized between one and ten MW ("Utility-scale") and approximately 42 MW of renewable energy facilities sized less than one MW ("Customer-scale"). The Company subsequently implemented its first DER programs on October 7, 2015,

with retroactive sign-up availability to those customer installations after January 1, 2015, if they so chose.

DER PROGRAM COSTS

Q. PLEASE DESCRIBE THE DER PROGRAM COSTS THAT WERE INCURRED BY DESC DURING THE REVIEW PERIOD AND THAT THE COMPANY PROJECTS TO INCUR DURING THE FORECAST PERIOD.

A. During the Review Period, the Company offered customers a variety of solar programs approved by the Commission in Order No. 2015-512. As a result of these efforts, the balance of DER program costs at the end of the Review Period totaled ($1,334,400) in avoided costs and $3,271,553 in incremental costs. For the period January 1, 2020, through April 30, 2021, the Company projects that DER Program costs will include $9,656,047 in avoided costs and $25,820,601 in incremental costs.

Q. WHAT ARE AVOIDED AND INCREMENTAL COSTS?

A. Section 58-39-120(B) defines "avoided costs" as meaning "payments for purchases of electricity made according to an electrical utility's most recently approved or established avoided cost rates in this State or rates negotiated pursuant to [the Public Utility Regulatory Policies Act ("PURPA")], in the year the costs are incurred, for purchases of electricity from qualifying facilities pursuant to Section 210 of [PURPA]…." "Incremental costs" are defined by S.C. Code Ann. § 58-39-140(A) as meaning "all reasonable and prudent costs incurred by an electrical utility

to implement a distributed energy resource program … including, but not limited to:

(1) The cost an electrical utility incurs in excess of the electrical utility's avoided cost rate …;

(2) The full cost of an electrical utility's investment in nongenerating distributed energy resources …;

(3) The electrical utility's weighted average cost of capital as applied to the electrical utility's investment in distributed energy resources …;

(4) Operating and maintenance expenses, taxes, insurance, depreciation, overheads, and all other expenses properly considered to be expenses associated with a project, asset, or program under generally accepted principles of regulatory, or utility accounting or accounting orders issued by the commission …; [and]

(5) The electrical utility's incremental labor cost associated with implementing a distributed energy resource program."

Q. WHAT DO THESE COSTS INCLUDE?

A. These costs include the avoided and incremental costs associated with DESC's approved DER programs, including 1) offering Utility-scale DER programs; 2) offering Customer-scale Net Energy Metering ("NEM") incentives, Performance Based Incentives and Bill Credit Agreement programs; and 3) offering the Company's Community Solar program. These costs also include general and

administrative expenses directly resulting from offering DER programs to the Company's customers, such as information technology system enhancements, revenue-grade meters, marketing and education expenses, and the incremental labor required to support the programs and increased volume of customer inquiries. Company Witness Allen Rooks provides these cost components in his testimony.

UTILITY-SCALE DER PROGRAMS

Q. PLEASE UPDATE THE COMMISSION ON THE COMPANY'S PROGRESS TOWARD MEETING ITS UTILITY-SCALE DER GOALS AS OF THE END OF THE REVIEW PERIOD.

A. During its 2018 fuel proceeding, DESC reported that, as of December 31, 2017, nine solar farms totaling 48.16 MW had been constructed and interconnected to DESC's distribution system as part of the Company's approved DER program. As such, DESC has achieved the 1% goal for Utility-scale facilities set forth in Act 236.

CUSTOMER-SCALE DER PROGRAMS

Q. PLEASE UPDATE THE COMMISSION ON THE COMPANY'S PROGRESS TOWARD MEETING ITS CUSTOMER-SCALE DER GOALS AS OF THE END OF THE REVIEW PERIOD.

A. To accomplish its Customer-scale DER goals, DESC offered its residential and non-residential customers a new retail net energy metering program ("NEM

2.0"), through which customers receive bills that are equivalent to bills that the customers would have had if the customers received a credit for each kilowatt-hour ("kWh") generated by their renewable resources that is equal to the price that is charged per kWh for the energy consumed. The difference between the value of net metered customer generation, as determined using the methodology approved in Docket No. 2014-246-E, and the customer's retail rate is recoverable as a DER incentive.

Two Percent NEM Threshold

Prior to May 16, 2019, S.C. Code Ann. § 58-40-20(B) provided that "[n]o electrical utility shall be required to approve any application for interconnection from net energy metering customer generators if the total rated generating capacity of all applications for interconnection from net energy metering customer generators already approved . . . equals or exceeds two percent of the previous five year average of the electrical utility's South Carolina retail peak demand" (the "2% NEM threshold"). By letter dated May 16, 2019, in Docket No. 2014-246-E, DESC informed the Commission that it had achieved the 2.0% NEM threshold and that it had not accepted NEM applications submitted after May 3, 2019.

In Act No. 62 of 2019 ("Act 62"), the South Carolina General Assembly revised certain portions of Chapter 40 of Title 58 of the South Carolina Code of Laws Annotated, which govern net energy metering in South Carolina. Among other things, Act 62 eliminated the 2% NEM threshold. To conform to Act 62, DESC

submitted two revised tariffs – a "Rider to Retail Rates – Second Net Energy Metering for Renewable Energy Facilities," which reflects the closure of NEM 2.0 effective May 4, 2019, and a "Rider to Retail Rates – Third Net Energy Metering for Renewable Energy Facilities" ("NEM 3.0"), which, among other things, eliminates the 2% NEM threshold and makes net energy metering available to those customers who apply for it from May 17, 2019, through May 31, 2021. The Commission approved these tariffs by Order No. 2019-392, dated May 29, 2019.

NEM Participation

As of December 31, 2019, 10,139 DESC customers (10,008 residential and 131 non-residential) were participating in the Company's NEM 2.0 or 3.0, as compared to 8,774 participating customers as of December 31, 2018. Participation in NEM 2.0 accounts for approximately 76.66 MW of solar generating capacity (approximately 69.67 MW from residential and approximately 6.99 MW from non-residential) on DESC's system. Participation in NEM 3.0 accounts for approximately 3.70 MW of solar generating capacity (approximately 2.83 MW from residential and approximately 0.87 MW from non-residential) on DESC's system.

Performance Based Incentive

For residential customers participating in NEM 2.0, the Company also offered the opportunity to reserve—on a first-come, first-serve basis for up to a cumulative total of 9 MW of reserved capacity—a Performance Based Incentive

("PBI"). The available PBIs were fully reserved, and as of December 31, 2019, 1,042 of the NEM 2.0 residential customers (included in the residential customer count above) with generating capacity totaling approximately 7.85 MW (included in the generating capacity total above) were receiving the PBI. The remaining reservations have expired.

Bill Credit Agreement

As an alternative to NEM 2.0, DESC also offered its non-residential customers the opportunity to participate in its Bill Credit Agreement ("BCA") program in which all energy produced by the customer's generator is delivered to the DESC electrical system, and the customer is compensated at tiered, incentivized rates directly on the customer's DESC bill. As of December 31, 2019, DESC had 109 BCA customers totaling 19.23 MW in generating capacity. By Order No. 2017-246, the BCA program was indefinitely suspended to systems without approved applications and interconnection agreements by April 27, 2017.

In sum, as of December 31, 2019, DESC had 9,833 customers (9,614 residential and 219 non-residential) participating in its Customer-scale DER programs. This customer participation represented approximately 95.89 MW of solar generating capacity on DESC's system. As such, DESC has achieved the 1% goal for Customer-scale facilities set forth in Act 236.

Q. WHAT WAS THE TOTAL CUMULATIVE NEM GENERATING CAPACITY ON DESC'S SYSTEM AS OF DECEMBER 31, 2019?

A. As of December 31, 2019, the total cumulative NEM generating capacity provided by the 10,354 net metering customer-generator facilities on DESC's system was approximately 81.36 MW, or approximately 1.92% of the Company's five-year average peak demand of 4,225 MW set forth in Commission Order No. 2015-512. Of this total, approximately 1.00 MW of solar generating capacity comes from the 215 "NEM 1.0" participants, who have elected to remain on the net metering tariff in effect at the time NEM 2.0 was approved. These NEM 1.0 customers can remain on this rate schedule through December 31, 2020, after which time the NEM 1.0 rate will close and they will be required to move to NEM 2.0 or to any other available rate schedule for which they qualify.

COMMUNITY SOLAR

Q. PLEASE UPDATE THE COMMISSION ON THE PROGRESS OF DESC'S COMMUNITY SOLAR PROGRAM.

A. By Order No. 2016-707, the Commission approved the Credit Rate Agreement between DESC and Clean Energy Collective, LLC ("CEC") whereby CEC is authorized to develop, build, and market up to 16 MW of community solar renewable generating facilities. The individual solar panels in these facilities are available for DESC customers to either purchase or subscribe to their energy output as a credit on their DESC bills.

Springfield Solar, a 6 MW facility in Orangeburg County, and Nimitz Solar, an 8 MW facility in Jasper County, entered commercial operation in June 2018. Curie Solar, a 2 MW facility in Hampton County, entered commercial operation in February 2019.

As of December 31, 2019, the following number of customer accounts and associated MW of capacity have either been purchased or subscribed to in the three community solar facilities. The remaining 0.023 MW of capacity is reserved for Low-Income customers and is filled via a separate waitlist of Low-Income customers created by the marketing of DESC, CEC and 8 Community Assistance Agencies.

Segment	Accounts	Capacity (MW)
Low-Income	165	0.993
Residential	890	5.529
Church, School, Municipal	47	9.455
Total	1,102	15.977

At this time, the Company has no plans to expand its Community Solar program.

UTILITY INVESTMENT DER PROGRAMS

Q. HAVING MET BOTH THE 1% CUSTOMER-SCALE AND 1% UTILITY-SCALE GOALS, DOES DESC HAVE ANY CURRENT PLANS TO MOVE FORWARD WITH THE OPTIONAL 1% UTILITY-SCALE INVESTMENT ALLOWED IN S.C. CODE ANN. § 58-39-130(D)?

A. No. DESC has continued to evaluate battery energy storage, the microgrid project at its Lake Murray Training Center, and electric vehicle charging programs.

With respect to battery energy storage, the Company has filed a storage tariff to provide an opportunity for interested parties to develop and deploy battery energy storage on the DESC System. As such, the Company has decided not to pursue a battery storage project under S.C. Code Ann. § 58-39-130(D).

DESC has also decided not to move forward with the potential microgrid project at the Lake Murray Training Center, which had been considered to integrate advanced technologies such as lithium ion battery energy storage, fuel cells and flow batteries. After the merger with Dominion Energy, Inc., DESC learned of an existing microgrid project deployed by another subsidiary of Dominion Energy, Inc. as well as a second microgrid project that has been included in Dominion Energy Virginia's Grid Transformation Plan filing with the Virginia State Corporation Commission. DESC expects to gain valuable insights from these projects and accordingly decided not to move forward with the Lake Murray Training Center Microgrid project under S.C. Code Ann. § 58-39-130(D).

DESC continues to explore electric vehicle charging programs. As the global automotive movement continues towards all electric vehicle fleets, it is becoming increasingly important to prepare for electric vehicle charging programs for customers. Just as battery energy storage systems may mitigate peaks in power needs and prices, thoughtful designs in electric vehicle charging programs may provide solutions to enhance grid operations. DESC is not pursuing an electric vehicle charging program under S.C. Code Ann. § 58-39-130(D). However, when DESC identifies electric vehicle charging programs and rates that provide customer and system benefits, DESC anticipates applying to the Commission for approval to move forward with the programs and rates.

CONCLUSION

Q. WHAT IS DESC REQUESTING OF THE COMMISSION IN THIS PROCEEDING?

A. DESC respectfully requests that the Commission approve the Company's costs incurred in providing DER programs during the Review Period as being reasonable and prudent and find that the Company's fuel purchasing practices were reasonable and prudent for the Review Period.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.